Mercer and Summers Counties, West Virginia Table H.--Engineering Index Properties

(Absence of an entry indicates that the data were not estimated.)

Map symbol	 Denth	 USDA texture		Classif	icati	on		Fragr	ments			e passinumber		 Liquid	 Dlac-
and soil name	l nebru	USDA LEXEUTE	<u> </u>					 >10	3-10	 	sieve II	uliber		limit	
and boll name	 		' 	Unified	A	ASHTO		inches		4	10	40			index
	 In	 			¦			Pct	Pct		 		 	Pct	
At:	 	 	l I		1			 	 	 	l I	 	 	1	
Atkins	0-9	Silt loam	CL,	CL-ML, ML	A-4,	A-6			0	90-100	85 - 100	75-100	60-95	20-40	3-20
	•		ML,	SC, SM,	A-4	A-6			0-5	90-100	85-100	65-100	45-85	20-40	3-20
			CL		1										
		loam, sandy			1										
		loam		O14 147		- 4									
			CL, SM	GM, ML,	A-2,	A-4,	A-6		0-15	100-100	 60-100	50-95	30-85	20-40	1-15
		Silly Clay loam to	I SM		1			 	 	 	l I	 	 	1	
	'	gravelly sandy	i I		i			' 	! 	' 	İ	! 	' 		'
	İ	loam	İ		į			İ	İ	İ	İ	İ	İ	i	İ
BwF:											ļ.				
Berks	l ı ∩=7	 Shalweil+ loam	l CC	CM MT	17-2	7 - 4		 	 N=20	 50 - 80	 45 - 70	140-60	 30=55	125-36	l I 5=1∩
Derva	l 0 /		SC,		A 2,	пч		! 	1 0 20	1	145 70	140 00	30 33	123 30	1 3 10
	7-28	Channery loam,	GC,	GM, SC,	A-1,	A-2,	A-4		0-30	40-80	35-70	25-60	20-45	25-36	5-10
		very channery			1										
		loam, channery			1									1	
		silt loam		CM	1 7 1	A-2		 	0 40	125 65	105 55	120 40	115 25	124-38	0 10
		Channery loam, very channery		SM	A-1,	A-2			1 0-40	133-63	25-55	120-40	1 13-33	124-38	2-10
		loam, channery			i			! 	! 	! 	! 	 	! 		!
		silt loam	i		i			İ		İ	İ	İ	İ	i	İ
	35-39	Weathered			I										
		bedrock									ļ .				
Weikert	I I 0-6	 Shalv silt loam	l IGM,	ML, SM	 A-1,	A-2,	A-4	 	I I 0−10	I I 35-70	I I35-70	1 125-65	I I 20-55	1 130-40	 4-10
				GP-GM											
		very shaly			I										
		silt loam,			1										
		cherty loam			1					<u> </u>					<u> </u>
		Unweathered bedrock			1										
	 	Dearock	I I		1			 	I 	I I	l I	1	 	1	I I
Other Soils		·	İ		i										
								l	l	l	l				l

Print date: 06/04/2002

Table H.--Engineering Index Properties--Continued

Map symbol	 Depth	USDA texture	Classi	fication	Frag	ments		_	e passi umber	_	 Liquid	 Plas=
and soil name	201011		<u> </u>		>10	3-10	i	01010 1			limit	
	 	İ	Unified	AASHTO	inches	inches	4	10	40	200		lindex
	In	<u> </u>		-	Pct	Pct	!	! !	¦	<u> </u>	Pct	! !
CaC:	 				1	1	 	 			1	
Cateache	0-5 		CL, CL-ML, GC, GC-GM	A-4, A-6		0-5	 85-100 	 80-95 	75-90 	60-85 	20-40	4-15
	 	Channery silty clay loam, very channery silty clay loam	GC, GC-GM	A-2, A-4, A-6	 	0-15 	40-85 	35-80 	30-80 	25-70 	20-40 	4-15
	 	Very channery silty clay loam, extremely channery silty clay loam	GP, GP-GC	A-1, A-2, A- 4, A-6 	 	0-20 	20-60 	10-50 	10-45 	10-40 	20-40 	4-15
	35-39 	Weathered bedrock			 	 	 	 	 	 		
CaD:	, 			i	i	i	i	İ	İ	i	i	i
Cateache	0-5 	•	CL, CL-ML, GC, GC-GM	A-4, A-6		0-5 	85-100 	80-95 	75-90 	60-85 	20-40 	4-15
		Channery silty clay loam, very channery silty clay loam	GC, GC-GM	A-2, A-4, A-6	 	0-15 	40-85 	35-80 	30-80 	25-70 	20-40 	4-15
	 	Very channery silty clay loam, extremely channery silty	GP, GP-GC	A-1, A-2, A- 4, A-6	 	0-20 	20-60 	10-50 	10-45	10-40	20-40	4-15
		clay loam Weathered bedrock	 		 	 	 	 				

Table H.--Engineering Index Properties--Continued

		[Classi	fication	Fragi	ments	l Pe	rcentag	e passi	.ng		
Map symbol	Depth	USDA texture	1		l			sieve n	umber		Liquid	Plas-
and soil name				1		3-10	l				llimit	
		 	Unified	AASHTO	linches	inches	4	10	40	200		index
	In			- <u> </u>	Pct	Pct	' 	¦	¦	¦	Pct	
CbC:		 	1		 	 	 	1	1	1	1	
Cateache	0-5	Channery silt loam	CL, CL-ML, GC, GC-GM	A-4, A-6		0-10	70-85 	65-80 	60-75 	45-70 	20-40	4-15
		Channery silty clay loam, very channery silty clay loam	GC, GC-GM	A-2, A-4, A-6	 	0-15 	40-85 	35-80 	30-80 	25-70 	20-40 	4-15
		Very channery silty clay loam, extremely channery silty	GP, GP-GC		 	0-20	20-60 	10-50	10-45	10-40	20-40	4-15
		clay loam Weathered bedrock	 		 	 	 					
Berks	0-7	Channery silt loam	GC, GM, ML,	A-2, A-4		0-20	 50-80	45-70	40-60	30-55	25-36	5-10
		Channery loam, very channery loam, channery silt loam	GC, GM, SC, SM	A-1, A-2, A-4	 	0-30 	40-80 	35-70	25-60	20-45	25-36	5-10
		Channery loam, very channery loam, channery silt loam	İ	A-1, A-2	 	0-40	35-65 	25-55 	20-40	15-35 	24-38	2-10
	35-39	Weathered bedrock	 		 	 	 	 	 	 	 	
Other Soils												

Table H.--Engineering Index Properties--Continued

		[Classi	fication	Fragi	ments	l Pe	rcentag	e passi	.ng		
Map symbol	Depth	USDA texture	I		l			sieve n	umber		Liquid	Plas-
and soil name			1			3-10	l				llimit	
		1	Unified	AASHTO	linches	inches	4	10	40	200		index
	In			-	Pct	Pct	<u></u>	\ <u></u>	¦	¦	Pct	
CbC3:		 	 		 	 	 	1		1		
Cateache	0-5	Channery silt loam	CL, CL-ML, GC, GC-GM	A-4, A-6	i	0-10	70-85 	65-80 	60-75 	45-70 	20-40	4-15
		Channery silty clay loam, very channery silty clay loam	GC, GC-GM	A-2, A-4, A-6	 	0-15 	40-85 	35-80 	30-80 	25-70 	20-40 	4-15
		Very channery silty clay loam, extremely channery silty	GP, GP-GC 		 	0-20	20-60 	10-50	10-45	10-40	20-40	4-15
		clay loam Weathered bedrock	 		 	 	 					
Berks	0-7	Channery silt loam	GC, GM, ML,	A-2, A-4		0-20	 50-80	45-70	40-60	30-55	25-36	5-10
		Channery loam, very channery loam, channery silt loam	GC, GM, SC, SM	A-1, A-2, A-4	 	0-30 	40-80 	35-70	25-60	20-45	25-36	5-10
		Channery loam, very channery loam, channery silt loam	ĺ	A-1, A-2	 	0-40	35-65 	25-55 	20-40	15-35 	24-38	2-10
	35-39	Weathered bedrock	 		 	 	 	 	 	 	 	'
Other Soils												

Table H.--Engineering Index Properties--Continued

		[Classi	fication	Fragi	ments	l Pe	rcentag	e passi	.ng		
Map symbol	Depth	USDA texture	I		l			sieve n	umber		Liquid	Plas-
and soil name						3-10	l				llimit	
		 	Unified	AASHTO	linches	inches	4	10	40	200		index
	In	<u>'</u>	<u>'</u>	- 	Pct	Pct	'	<u> </u>	<u> </u>	<u> </u>	Pct	¦
CbD:		 	 		 	 	 					
Cateache	0-5		CL-ML, GC, GC-GM, CL	A-4, A-6		0-10	70-85 	65-80 	60-75 	45-70 	20-40	4-15
		Channery silty clay loam, very channery silty clay loam	GC, GC-GM	A-2, A-4, A-6	 	0-15 	40-85 	35-80 	30-80 	25-70 	20-40 	4-15
 		Very channery silty clay loam, extremely channery silty	GP, GP-GC		 	0-20 	20-60 	10-50 	10-45 	10-40 	20-40 	4-15
		clay loam Weathered bedrock	 		 	 	 					
Berks	0-7	Channery silt loam	GC, GM, ML,	A-2, A-4		0-20	 50-80	45-70	40-60	30-55	25-36	5-10
		Channery loam, very channery loam, channery silt loam	GC, GM, SC, SM	A-1, A-2, A-4	 	0-30 	40-80 	35-70	25-60 	20-45	25-36	5-10
		Channery loam, very channery loam, channery silt loam	İ	A-1, A-2	 	0-40	35-65 	25-55 	20-40	15-35 	24-38	2-10
	35-39	Weathered bedrock	 		 	 	 	 	 	 	 	
Other Soils		i	i	i	i	!		i	·	i	·	i

Table H.--Engineering Index Properties--Continued

			Classi:	fication	Frag	ments		rcentag				
	Depth	USDA texture	I		l			sieve n	umber		Liquid	
and soil name			I		>10		l				limit	
	 		Unified	AASHTO	inches	linches	4	10	40	200		index
	' In			-	Pct	Pct	! !	<u> </u>	. '	¦	Pct	! !
CbD3:	 	I I	 		 	 	 	1	1	1	1	
Cateache			CL, CL-ML, GC, GC-GM	A-4, A-6	 	0-10	70-85 	65-80 	60-75 	45-70 	20-40	4-15
	 	Channery silty clay loam, very channery silty clay loam	GC, GC-GM	A-2, A-4, A-6	 	0-15 	40-85 	35-80 	30-80 	25-70 	20-40	4-15
	23-35 	Yearn Very channery silty clay loam, extremely channery silty	GP, GP-GC 		 	0-20 	 20-60 	10-50	10-45	110-40	20-40	4-15
		clay loam Weathered bedrock	 	 	 	 	 					
Berks		Channery silt loam	GC, GM, ML,	A-2, A-4	 	0-20	 50-80 	45-70	40-60	30-55	25-36	5-10
	7-28 	Channery loam, very channery loam, channery silt loam	GC, GM, SC, SM	A-1, A-2, A-4	 	0-30 	40-80 	35-70	25-60	20-45	25-36	5-10
	 	Channery loam, very channery loam, channery silt loam	ĺ	A-1, A-2	 	0-40	35-65 	25-55 	20-40	15-35 	24-38	2-10
	35-39	Weathered bedrock	 	 	 	 	 	 	 	 	 	
Other Soils		·		·	· 			i	i	i	i	·

Table H.--Engineering Index Properties--Continued

		T	Classi:	fication	Fragi	ments			e passi			1
	Depth	USDA texture	[l			sieve n	umber		Liquid	
and soil name					>10		l				limit	
	 		Unified	AASHTO	inches	linches	4	10	40	200		index
	In	<u> </u>	'	-	Pct	Pct	! !	¦	·	!	Pct	! !
CbF:	 	1	 		 	 	 	1		1		
Cateache			CL, CL-ML,	A-4, A-6	 	0-10	70-85 	65-80 	60-75 	45-70 	20-40	4-15
	 	Channery silty clay loam, very channery silty clay loam		A-2, A-4, A-6	 	0-15 	40-85 	35-80 	30-80 	25-70 	20-40	4-15
	23-35 	Yearn Very channery silty clay loam, extremely channery silty	GP, GP-GC 		 	0-20 	 20-60 	10-50 	10-45	 10-40 	20-40	4-15
		clay loam Weathered bedrock	 		 	 	 					
Berks		Channery silt loam	GC, GM, ML,	A-2, A-4	 	0-20	 50-80	45-70	140-60	30-55	25-36	5-10
	7-28 	Channery loam, very channery loam, channery silt loam	GC, GM, SC, SM	A-1, A-2, A-4	 	0-30 	40-80 	35-70	25-60 	20-45	25-36	5-10
	 	Channery loam, very channery loam, channery silt loam	Ī	A-1, A-2	 	0-40	35-65 	25-55 	20-40	15-35 	24-38	2-10
	35-39	Weathered bedrock	 	 	 	 	 	 	 	 	 	
Other Soils		·		·	i	i	i	i	i	i	i	i

Table H.--Engineering Index Properties--Continued

I			Classi:	fication	Frag	ments		rcentag				
	Depth	USDA texture	[l			sieve n	umber		Liquid	
and soil name					>10		l				limit	
	 		Unified	AASHTO	linches	linches	4	10	40	200		index
	In	<u> </u>	'	-	Pct	Pct	! !	¦	·	!	Pct	! !
CbF3:	 	I I	 		 	 	 	1	1	1	1	
Cateache			CL, CL-ML,	A-4, A-6	 	0-10	70-85 	65-80 	60-75 	45-70 	20-40	4-15
 	 	Channery silty clay loam, very channery silty clay loam	GC, GC-GM	A-2, A-4, A-6	 	0-15 	40-85 	35-80 	30-80 	25-70 	20-40 	4-15
	23-35 	Very channery silty clay loam, extremely channery silty	GP, GP-GC 		 	0-20 	 20-60 	10-50	10-45	110-40	20-40	4-15
		clay loam Weathered bedrock	 	 	 	 	 					
Berks		Channery silt loam	GC, GM, ML,	A-2, A-4		0-20	 50-80	45-70	140-60	30-55	25-36	5-10
	7-28 	Channery loam, very channery loam, channery silt loam	GC, GM, SC, SM	A-1, A-2, A-4	 	0-30 	40-80 	35-70	25-60	20-45	25-36	5-10
 	 	Channery loam, very channery loam, channery silt loam	Ī	A-1, A-2	 	0-40	35-65 	25-55 	20-40	15-35 	24-38	2-10
	35-39	Weathered bedrock	 	 	 	 	 	 	 	 	 	
Other Soils		·		·	i			·	i	i	i	·

Table H.--Engineering Index Properties--Continued

I			Classi:	fication	Frag	ments			re passi			
	Depth	USDA texture	l		l			sieve n	umber		Liquid	
and soil name			l		>10		l				limit	
		 	Unified	AASHTO	inches	inches	4	10	40	200		index
	In		' <u></u>	<u> </u>	Pct	Pct	' 	¦	\ <u></u>	¦	Pct	'
CkD:	 	 	 		 	 	 	i i	1	1		
Cateache			CL, CL-ML,	A-4, A-6	 	15-30 	70-85 	65-80 	60 - 75	45-70 	20-40	4-15
 	 	Channery silty clay loam, very channery silty clay loam		A-2, A-4, A-6	 	0-15 	40-85 	35-80 	30-80 	25-70 	20-40 	4-15
	23-35 	Very channery silty clay loam, extremely channery silty	GP-GC 	A-1, A-2, A- 4, A-6	 	0-20 	20-60 	10-50	110-45	10-40	20-40	4-15
	35-39	clay loam Weathered bedrock	 			 	 					
Berks		Very stony silt loam	 GC, GM, SC, SM	A-2, A-4		15-30	40-80	35-70	30-60	25-45	25-36	5-10
	7-28 		GC, GM, SC,	A-1, A-2, A-4	 	0-30 	40-80 	35-70 	25-60 	20-45	25-36 	5-10
	 	Shaly loam, very shaly loam, shaly silt loam	GM, SM 	A-1, A-2	 	0-40	35-65 	25-55 	20-40	15-35 	24-38	2-10
	35-39	Weathered bedrock	 		 	 	 	 	 	 		
Other Soils		·				· 	· 	i	·	i	i	·

Table H.--Engineering Index Properties--Continued

 Map symbol	Denth	 USDA texture	Classif	ication	Frag	ments			e passinumber		 Liquid	 Plas-
and soil name	202011		 Unified	 AASHTO		3-10 inches	I	1 10	40		limit	
i		i 	İ	i	.i	.i	İ	İ	i	İ	i	i
	In				Pct	Pct					Pct	
CkF:		! [1			 	 	 	 		
Cateache		Very stony silt	CL, CL-ML,	A-4, A-6	i	15-30 	70-85 	65-80 	60-75 	45-70 	20-40	4-15
 		Channery silty clay loam, very channery silty clay loam	GC, GC-GM	A-2, A-4, A-6		0-15 	40-85 	35-80 	30-80 	25-70 	20-40 	4-15
		Very channery silty clay loam, extremely channery silty clay loam	GP-GC 	A-1, A-2, A- 4, A-6 	 	0-20 	20-60 	10-50 	10-45 	10-40 	20-40 	4-15
 	35-39	Weathered bedrock	 				 	 	 	 	 	
Berks		Very stony silt	GC, GM, SC,	A-2, A-4	i	15-30 	40-80 	 35-70 	30-60	 25-45 	25-36	5-10
			GC, GM, SC, SM 	A-1, A-2, A-4 	 	0-30 	40-80 	35-70 	25-60 	20-45 	25-36 	5-10
; !	28-35		GM, SM 	A-1, A-2 		0-40	35-65 	25-55 	20-40	 15-35 	24-38	2-10
	35-39	Weathered bedrock	 	 			 	 	 	 	 	
Other Soils		 	 	 	i		 	 	i	 	 	
ClD:	0.6				1							
Caneyville	6-10		CL, CL-ML, ML CH, CL 	A-4, A-6 A-7 					75-100 75-100 			2-12
 	10-29		 CH 	 A-7 		0-3	 90 - 100	 85-100 	 75 - 100 	 65-100 	 50-75 	 30-45
į	29-33	Unweathered bedrock					 	 		 		

Table H.--Engineering Index Properties--Continued

Map symbol	Depth	 USDA texture	Classif	ication	l	ments		rcentage sieve n	_	-	 Liquid	 Plas-
and soil name		 - -	 Unified	 AASHTO		3-10 inches		10	40	200		ticity index
	In	 	 	 	Pct	Pct	! 	¦	 	¦	Pct	¦
ClF: Caneyville	0-6	 Silt.loam	 CL, CL-ML, ML	 A-4. A-6		 0-3	 90-100	 85-100	 75-100	 60-95	 20-35	 2-12
	6-10	•		A-7 				85-100 				20-45
ĺ		Clay, silty clay	CH	A-7		0-3	90-100	85-100	75-100	65-100	50-75	30-45
	29-33	Crdy Unweathered bedrock	 	 		 	 	 	 	 	 	
Cm:												
Chagrin 	10-36	•	CL, CL-ML, ML ML, SM 	A-4 A-2, A-4, A-6 			•	85-100 75-100 				•
 	36-60	loam Stratified silt loam to fine sand	 ML, SM 	 A-2, A-4 	 	 0 	 85-100 	 75-100 	 50-85 	 15-80 	 20-40 	 NP-10
Holly		 	 	 		 	 	 	 	 	 	
CnD:	0.0				į							
Clymer 		•	GC, GM, ML, SM	A-4 A-2, A-4 	 			75-95 50-95 				
	36-48	Channery loam, very channery loam, channery	GM, SM	A-1, A-2, A- 3, A-4	 	10-30 	 30-75 	 25-70 	20-60 	5-40 	14-32 	NP-9
	48-52	sandy loam Weathered bedrock	 	 		 	 	 	 	 	 	
Gilpin 	6-27	Channery loam,		A-4, A-6 A-2, A-4, A-6 		0-5 0-30 						4-15 4-15 4-15
 	27-35	clay loam Channery loam, very channery silt loam, very shaly silty clay		 A-1, A-2, A- 4, A-6 	 	 0-35 	 25-55 	 20-50 	 15-45 	 15-40 	 20-40 	 4-15
 	35-39	loam Unweathered bedrock	 	 		 	 	 	 	 	 	

Table H.--Engineering Index Properties--Continued

Map symbol	Depth	 USDA texture	Classif	ication	Fragr	ments		rcentag			 Liquid	 Plas-
and soil name	1		' Unified	 AASHTO	 >10 inches	3-10 inches	i	1 10	40		limit	
	———	l	 	l	 Pct	 Pct	 	 	l	 	Pct	l !
 Other Soils		 	 	 	 	 	 	 	 	 	 	
CnF:		 	 	[[[[[[
Clymer 			GC, GM, ML,	A-4 A-2, A-4 	 						10-30 14-32 	
, ,		Channery loam, very channery loam, channery sandy loam	GM, SM	A-1, A-2, A- 3, A-4	 	10-30 	30-75 	25-70 	20-60 	5-40 5-40	14-32	NP-9
	48-52	Weathered bedrock	 	 	 	 	 	 	 	 		
Gilpin 	6-27	Channery loam,		A-4, A-6 A-2, A-4, A-6							20-40 20-40 	
	27-35	clay loam Channery loam, very channery silt loam, very shaly		 A-1, A-2, A- 4, A-6	 	 0-35 	 25-55 	 20-50 	 15-45 	 15-40 	 20-40 	 4-15
 	35-39	silty clay loam Unweathered bedrock	 	 	 	 	 	 	 	 	 	
Other Soils						 						
CtC: Coolville	0 0		 CL, CL-ML, ML		 	 	 95-100					 4-12
	8-13 13-43	Silty clay loam	CL, ML	A-4, A-6 A-6, A-7 A-7	 	0	95-100	85-100	80-100	75-95	35-50 45-65	15-25
	43-60	Clay, silty clay, shaly silty clay	 CH, CL, MH 	 A-7 	 	 0-5 	95-100 	 85-100 	80-100	75-95 	45-65 	 20-36
 	48-60	loam Weathered bedrock 	 	 	 	 	 	 	 	 	 	

Table H.--Engineering Index Properties--Continued

Map symbol	l Donth			Classif	icati	on	Fragi	ments		rcentage	e passir	_	 Liquid	 Dl
and soil name	, peptu	USDA texture	<u> </u>				_	3-10	 	sieve n	umber		limit	
and soll name			1	Unified	l Ai	ASHTO	inches		 4	10	40	200		index
	 In	I			 		_ Pct	 Pct		 	 		Pct	
Latham	6-36	· ·	CH,	CL-ML, ML	 A-4, A-7 	A-6	 		 85-100 85-100 				 20-35 45-65 	
	36-40	silty clay Weathered bedrock			 			 	 	 	 		 	
Other Soils					İ			 	 	 	 			
CtD:	 	 	 		 		 	 	 	 	 			
Coolville	0-8	Silt loam	CL,	CL-ML, ML	A-4,	A-6	i	0	95-100	90 - 100	80-100	70-90	24-40	4-12
	8-13	Silty clay loam	CL,	ML	A-6,	A-7		0	95-100	85-100	80-100	75-95	35-50	15-25
		Clay, silty clay, silty clay loam	CH,	CL, MH	A-7 			0 - 5	95 - 100 	85 - 100 	80-100 	75-95	45-65 	20 - 36
	43-60	•	CH, 	CL, MH	 A-7 			0-5 	 95-100 	 85-100 	 80-100 	75-95	45-65 	 20-36
	48-60	Weathered bedrock	 		 			 	 	 	 			
Latham	ı I 0-6	 Silt.loam	I CT.	CL-ML, ML	I A – 4 .	A-6		I 0-5	I 85-100	I 175-100	1 170-100	 65 - 90	120-35	I 5-12
	6-36		CH,	·	A-7				•				45-65 	
	 36-40	silty clay Weathered bedrock	 		 			 	 	 	 		 	
Other Soils	 				 			 		 				
CuF:	 	l I	l I		 			 	 	 	 		 	
Culleoka	7-29	Silt loam Channery silt loam, flaggy loam, silty		CL-ML, ML CL-ML, ML		A-6	 	•	•	•			15-35 20-40 	
	33-37	clay loam Unweathered bedrock	 		 			 	 	 	 		 	

Table H.--Engineering Index Properties--Continued

Map symbol	 Depth	 USDA texture	Classif	icati	on		Fragr	ments		_	e passi umber	_	 Liquid	 Plas-
and soil name			 Unified	 A	ASHTO		>10 inches		4	10	40	200	llimit	
	 In	- 	 	-			Pct	 Pct		 			Pct	
DeC:			 	1			 	 	 	I I		I I		1
Dekalb	0-9	Channery sandy loam	CL-ML, GM, ML, SM	A-1,	A-2,	A-4	 	0-30	 50-90 	45-80 	40-75 	20 - 55	10-32	NP-10
	9-21 	Channery sandy loam, channery loam, very channery sandy loam	ML, SM	A-1, 	A-2,	A-4	 	5-40 	50-85 	40-80 	40-75 	20-55 	15-32 	NP-9
	21-28	Channery sandy loam, flaggy sandy loam, very flaggy	GC, GM, SC, SM 	A-1,	A-2,	A-4	 	10-50 	45-85 	25-75 	20-65	15-40	15-32	NP-9
	 28-32 	loamy sand Unweathered bedrock	 	 			 	 	 					
DeD:					7 0	- 1	į							
Dekalb	0-9 	Channery sandy loam	CL-ML, GM, ML, SM	A-1,	A-2,	A-4		0-30 	50-90 	45-80 	40-75 	120-55	10-32 	 NP-10
	9-21 	Channery sandy loam, channery loam, very channery sandy loam	ML, SM 	A-1,	A-2,	A-4	 	5-40 	50-85 	40-80 	40-75 	20-55 	15-32 	NP-9
	 21-28 	Channery sandy loam, flaggy sandy loam, very flaggy		A-1,	A-2,	A-4	 	 10-50 	 45-85 	25-75 	20-65 	15-40	15-32	NP-9
	 28-32 	loamy sand Unweathered bedrock	 	 			 	 	 					
DgD: Dekalb	 0-9		 CL-ML, GM, ML, SM	 A-1,	A-2,	A-4	 	 10-30	 50-90	 45-80	40-75	120-55	110-32	 NP-10
	9-21 	Channery sandy loam, channery loam, very channery sandy	GC-GM, GM, ML, SM	A-1,	A-2,	A-4	 	5-40 	 50-85 	140-75	140-75	20-55	15-32	NP-9
	 21-28 	loam Channery sandy loam, flaggy sandy loam, very flaggy		 A-1, 	A-2,	A-4	 	 10-50 	 45-85 	 25-75 	 20-65 	 15-40 	 15-32 	 NP-9
	 28-32 	loamy sand Unweathered bedrock	 	 			 	 	 	 	 	 	 	

Table H.--Engineering Index Properties--Continued

Map symbol	Depth	 USDA texture	Classif	ication		l	ments		rcentag sieve n	_	_	 Liquid	
and soil name		 	 Unified	AASHT	.0		3-10 inches	 4	10	40	200	limit 	ticity index
	In	'	 			Pct	Pct	' 	¦		¦	Pct	¦
Gilpin		Very stony silt loam	CL, CL-ML, GC, SC	A-2, A-4	1, A-6	 	10-40 	50-90 	45-85 	35-75 	30-70 	20-40	4-15
		loam, channery loam, silty	CL, CL-ML, GC-GM, SC 	A-2, A-4	ŀ, A-6	 	0-30 	50-95 	45-90 	35-85 	30-80 	20-40	4-15
	27-35	clay loam Channery loam, very channery silt loam, very shaly silty clay	 GC, GC-GM 	A-1, A-2 4, A-6 	2, A-	 	 0-35 	 25-55 	 20-50 	 15-45 	 15-40 	 20-40 	 4-15
	35-39	loam Unweathered bedrock	 	 		 	 	 					
Jefferson Stony-	0-9		 CL, GM, ML, SM	A-4		 	5-20	 65-90 	160-90	50-80	40-60	25-35	2-10
		 Channery loam, gravelly clay loam, gravelly sandy clay loam	ML, SC, SM,	A-2, A-4	1, A-6	 	5-20 	 75-90 	70-90 	50-80 	30-70	15-35 	2-15
	37-60	Year Very channery loam, gravelly clay loam, gravelly sandy clay loam	ML, SM 	A-1, A-2	2, A-4	 	5-25 	 55-75 	50-75 	35-70 	120-60	20-35 	2-10
Other Soils			 		-			 					
DgF: Dekalb			 CL-ML, GM, ML, SM	 A-1, A-2	2, A-4	 	 10-30	 50-90	45-80	 40-75	20-55	110-32	 NP-10
	9-21	Channery sandy loam, channery loam, very	GC-GM, GM,	A-1, A-2 	2, A-4	 	5-40 	 50-85 	40-75 	40-75 	20-55	15-32 	NP-9
	21-28	channery sandy loam Channery sandy loam, flaggy sandy loam, very flaggy	 GC, GM, SC,	 A-1, A-2 	2, A-4	 	 10-50 	 45-85 	 25-75 	 20-65 	 15-40 	 15-32 	 NP-9
	28-32	loamy sand Unweathered bedrock	 	 		 	 	 	 	 	 	 	

Table H.--Engineering Index Properties--Continued

Map symbol	 Depth	USDA texture	Classif	icatio	on		Fragn	nents		_	e passi	-	 Liquid	 Dlac=
and soil name	l pebru	ODDA CEACUTE						3-10	! 	sieve II	uniber		limit	
			Unified	I AZ	ASHTO		inches		4	10	40	200		index
	In			<u> </u>			Pct	Pct	 		<u> </u>		Pct	
Gilpin		 Very stony silt loam	CL, CL-ML,	 A-2, 	A-4,	A-6	 	10-40	 50 - 90 	45-85 	35-75 	30-70	20-40	 4-15
	6-27 		CL, CL-ML,	A-2, 	A-4,	A-6	 	0-30	50-95 	45-90 	35-85 	30-80 	20-40 	4-15
	27-35 	Channery loam, very channery silt loam, very shaly silty clay		A-1, 4, 7 		A-	 	0-35	 25-55 	20-50 	15-45 	15-40 	20-40	4-15
		Unweathered		 					 	 		 		
Jefferson Stony-	 0-9		CL, GM, ML,	 A-4 				5-20	 65-90 	60 - 90	50-80 	40-60	25-35	2-10
		Channery loam, gravelly clay loam, gravelly sandy clay loam	CL, ML, SC, SM	A-2, 	A-4,	A-6	 	5-20	 75-90 	70-90 	50-80 	30-70 	15-35 	2-15
	37-60 	Very channery loam, gravelly clay loam, gravelly sandy clay loam	ML, SM	A-1, 	A-2,	A-4	 	5-25 	55-75 	50-75 	35-70 	20-60 	20-35 	2-10
Other Soils	 	 		 			 	 	 					
DrF: Dekalb				 A-1,	A-2,	A-4		10-30	 50 - 90	45-80	 40-75	 20-55	 10-32	 NP-10
	9-21 	sandy loam Channery sandy loam, channery loam, very channery sandy loam	ML, SM	 A-1, 	A-2,	A-4		 5-40 	 50-85 	 40-75 	 40-75 	 20-55 	 15-32 	 NP-9
		Channery sandy loam, flaggy sandy loam, very flaggy loamy sand	GC, GM, SC, SM	A-1, 	A-2,	A-4	 	10-50 	45-85 	25-75 	20-65 	15-40 	15-32 	NP-9
		Unweathered bedrock		 					 			 		
Rock Outcrop				ĺ										

Table H.--Engineering Index Properties--Continued

Map symbol	l Depth	 USDA texture	Classif	ication	i	ments		rcentag sieve n			 Liquid	
and soil name		 	 Unified	 AASHTO	>10 inches	3-10 inches	4	10	40	200	limit 	ticity index
	 In			 	 Pct	Pct	¦	' 	 	¦	Pct	'
								l I	1	1		
Other Soils	 			 				 				
ErB:												
Ernest 	9-24 	Silty clay loam, silt loam, channery	CL, CL-ML, ML CL, CL-ML, ML 								20-40 25-50 	
	24-38	silt loam Channery silt loam, channery loam, silty		 A-4, A-6, A-7 	 !	0-20 	 70-95 	 55-95 	 55-90 	45-90 	20-45	 4-18
	38-60 	clay loam Channery silt loam, silt loam, silty clay loam	 CL, GM, ML, SC 	 A-4, A-6, A-7 	 	 0-20 	 70-95 	 45-95 	 45-90 	 40-90 	 25-50 	 6-22
Atkins	 			 				 				
ErC:			 	 								
Ernest 	9-24 	Silty clay loam, silt loam, channery	CL, CL-ML, ML CL, CL-ML, ML 									4-15 6-22
	24-38 	silt loam Channery silt loam, channery loam, silty		 A-4, A-6, A-7 	 	 0-20 	 70-95 	 55-95 	 55-90 	 45-90 	20-45	 4-18
	38-60 	clay loam Channery silt loam, silt loam, silty clay loam	 CL, GM, ML, SC 	 A-4, A-6, A-7 	 	0-20	 70-95 	 45-95 	45-90 	140-90	 25-50 	 6-22
Atkins	 	 	 	 	 		 	 				

Table H.--Engineering Index Properties--Continued

		1		Clas	sif	icati	on		Fragi	ments		rcentag	_	_	1	
Map symbol	Depth	USDA texture	!								! :	sieve n	umber		Liquid	
and soil name	 	 	 1 	Unified		 A	ASHTO		>10 inches	3-10 inches	 4	10	40	200	limit 	ticity index
	In		! !			¦			Pct	Pct	! !	! !		!	Pct	!
ErD:	 	 	l I			 			 	 	 	l I	 	1	1	
Ernest	9-24 	Silty clay loam, silt loam, channery	CL,	CL-ML,				A-7							20-40 25-50	
	24-38	silt loam Channery silt loam, channery loam, silty		GM, ML	,	 A-4, 	A-6,	A-7	 	 0-20 	 70-95 	 55-95 	 55-90 	45-90 	 20-45 	 4-18
	38-60 	clay loam Channery silt loam, silt loam, silty clay loam	 CL, SC 		,	 A-4, 	A-6,	A-7	 	 0-20 	 70-95 	 45-95 	 45-90 	 40-90 	 25-50 	 6-22
EuC:	 	 	 			 			 	 	 	 				
Ernest		Very stony silt	CL,	CL-ML,	ML	A-4,	A-6			3-15	65-80	60-80	55-75	55-70	20-40	4-15
	9-24 	· ·	l	CL-ML,	ML	A-4,	A-6,	A-7	 	0-15 	 75-100 	 70-95 	65-90 	55 - 90	25-50	6-22
	 24-38 	silt loam Channery silt loam, channery loam, silty	CL,		,	 A-4, 	A-6,	A-7	 	 0-20 	 70-95 	 55-95 	 55-90 	 45-90 	 20-45 	 4-18
	38-60 	clay loam Channery silt loam, silt loam, silty clay loam	 CL, SC 		,	 A-4, 	A-6,	A-7	 	 0-20 	 70-95 	 45-95 	 45-90 	 40-90 	 25-50 	 6-22
Atkins	 		 						 	 	 	 				
Buchanan Stony	 0-7	• •		CL-ML,		 A-4,	A-2		 	 3-20	 50-90	 45-75	40-75	30-65	20-35	2-11
	 	Gravelly loam, silt loam, gravelly sandy	CL, SM	GM, ML	,	A-2,	A-4		 	0-20	 50-100 	45-90 	40-90 	20-80	20-35	2-15
	26-60 	clay loam Gravelly loam, loam, channery clay loam			,	 A-2, 	A-4,	A-6	 	 0-20 	 50-100 	 30-80 	 30-75 	 20-60 	 20-35 	 2-15

Table H.--Engineering Index Properties--Continued

Map symbol	Depth	 USDA texture		Classif	icati	on		Fragn	nents		_	e passi: umber	ng	 Liquid	 Plas-
and soil name	_	 	Un:	ified	 A	ASHTO		>10 inches		1 4	10	40	200	llimit	ticity index
	In	I	 		¦			Pct	Pct	 			 	 Pct	
EuD:		1	 		 					 	1	1	 	1	
Ernest	0-9	Very stony silt	CL, CI	L-ML, ML	 A-4,	A-6			3-15	 65-80	60-80	55-75	 55 - 70	20-40	4-15
	0.04	loam							0.15						
		loam, silt loam, channery	İ	L-ML, ML	A-4, 	A-6,	A-/	 	0-15	/5-100 	70-95 	65-90 	 	25-50 	6-22
	24 20	silt loam Channery silt	let en	M MT	17 /	7 6	7 7		0.20	170 05			145 00	 20-45	4-18
		loam, channery		м, мь,	A-4, 	A-0,	A- /		0-20	70=93 			43=90		4-10
		clay loam Channery silt loam, silt loam, silty clay loam	 CL, G1 SC 	M, ML,	 A-4, 	A-6,	A-7		0-20	 70-95 	 45-95 	 45-90 	 40-90 	 25-50 	 6-22
Buchanan Stony	0-7				 A-2,	A-4			3-20	 50-90	 45-75	 40-75	 30-65	20-35	2-11
		Gravelly loam, silt loam, gravelly sandy	SM		 A-2, 	A-4		 	0-20	 50-100 	 45-90 	 40-90 	 20-80 	20-35 	 2-15
	26-60	clay loam Gravelly loam, loam, channery clay loam		M, ML,	 A-2, 	A-4,	A-6		0-20	 50-100 	 30-80 	 30-75 	 20-60 	 20-35 	 2-15
Other Soils			 -												
FcD:		1	 		 					 	 	 	 		
Frederick		Very gravelly silt loam	GC, GG	C-GM	A-1,	A-2			0-15	40-60 	35-50 	25-35 	15-30 	20-45 	5-25
		silty clay,	CH, MI SM	H, SC,	A-7 			 	0-5	80-100 	50-95 	45-90 	35-85 	50-70 	20-40
	17-72	clay Clay, silty clay	 CH 		 A-7 				0-5	 90-100 	 85-100 	 70-100 	 60-85 	 60-85 	 30-50
FcF:		į			İ										
Frederick	0-13	Very gravelly silt loam	GC, G0 	C-GM	A-1, 	A-2			0-15	40-60 	35-50 	25 - 35 	15-30 	20-45 	5 - 25
		Gravelly silty clay loam, silty clay, clay	CH, MI SM 	H, SC,	A-7 			 	0-5	80-100 	50-95 	45-90 	35-85 	50-70	20-40
			I CH 		 A-7 			 	0-5	90-100	 85-100	70-100	 60-85	60-85 	30-50

Table H.--Engineering Index Properties--Continued

			Classif	ication	Fragi	ments			e passir			
Map symbol and soil name	Depth	USDA texture	I	T	 >10	J 3-10	 	sieve n	umber		Liquid limit	
and soli hame	 		Unified	AASHTO	inches		4	10	40	200		index
	l I Tn	<u> </u> 	<u> </u> 	 	 Pct	l l Pct	<u> </u>	¦			 Pct	
				İ			i İ	İ	İ	' 		'
FkC:				Į.				I	I			
Frederick	I I 0−13	 Silt loam	CL, CL-ML, ML	 Δ=4 Δ=6		I 0-5	I 180-100	I I 75-100	1 175-95	1 175-90	115-35	I IND=15
			CH, MH		i						50-70	
		loam, silty		1	i		1	1	1		1	1
		clay, clay	i	i	i	İ	i	İ	i	i I	i	i I
			I CH	A-7	i	I 0-5	90-100	85-100	70-100	60-95	60-85	30-55
		clay	İ	İ	i	İ	İ	İ	İ		İ	İ
			[1								
FrC: Frederick	 0=13	 Cravelly eilt	LCI CC CM	 \ \ \ \ \ \ \ \ = 6		 0=10	 60=80	 50 - 75	 40 - 70	 35=65	 15-35	 ND=15
riedelick			ML			1 0 10	1	1 50 75	1 40 70	33 03	1 5 55	
	13-17	Gravelly silty	CH, MH, SC,	A-7	i	0-5	80-100	50-95	45 - 90	35-85	50-70	20-40
		clay loam,	SM	I	1							
		silty clay,		1								
		clay		I								
		Clay, silty	CH	A-7		0-5	90-100	85-100	70-100	60-85	60-85	30-50
	 	clay		1		 						
FrD:	 			 		 	 	 	 	 		
Frederick	0-13	Gravelly silt	CL, GC, GM,	A-4, A-6	i	0-10	60-80	50-75	140-70	35-65	15-35	NP-15
			ML	I		l		I		l		l
		Gravelly silty		A-7		0-5	80-100	50-95	45-90	35-85	50-70	20-40
			MH	1	I							
		silty clay,		!	!							!
		clay Clay, silty	 CH	 A-7		l l 0-5	100 100	105 100	170 100	 	1 160-85	120 50
		clay	I CH	A- /		1 0-5	190-100	1 182-IOO	1/0-100	60-85 	100-85	130-30
	 	Ciay		i		 	 	 	 	 		
FrF:		İ	i	i	i	İ	i	İ	i	İ	i	İ
Frederick	0-13	Gravelly silt	CL, GC, GM,	A-4, A-6		0-10	60-80	50-75	40-70	35-65	15-35	NP-15
			ML	I								
		Gravelly silty		A-7		0-5	80-100	50-95	45-90	35-85	50-70	20-40
			SM	[[
		silty clay,										
		clay	1011	17 7		l l 0-5	100 100	105 100	170 100	1 (0 05	100 05	120 50
		Clay, silty clay	CH	A-7		1 0-5	1 120-T00	1 102-T00	1 /0-100	6U-85 	60-85	130-50
	! 	l cray	1	I I		l I	! 	l I	1	 	1	!
	ı	1	1	1	1	1	1	1	1	1	1	1

Table H.--Engineering Index Properties--Continued

			Classi	fication	Frag	ments	l Pe		e passi			
Map symbol and soil name	Depth 	USDA texture			>10	1 3-10		sieve n	umber		Liquid limit	
and soll name	 		Unified	AASHTO		linches	4	10	40	200		index
	l I Tn	<u> </u>	<u> </u>		 Pct	 Pct		<u> </u>	-	<u> </u>	 Pct	<u> </u>
	111				100	100						
GaB:			I	1	1					1	1	
Gilpin				A-4, A-6					170-85		20-40	
	 	loam, silty	GC, SC	A-2, A-4, A-6	5 	0-30 	50-95	45-90 	35-85	30-80	20-40 	4-15
		clay loam			1							
	 	Channery loam, very channery silt loam, very shaly	GC, GC-GM 	A-1, A-2, A- 4, A-6 	 	0-35 	25-55 	20-50 	15-45 	15-40 	20-40 	4-15
		silty clay	İ	i	i	İ	i	i	i	i	i	i
		loam	<u> </u>	1	1	1	1	1	1	1	1	1
	35-39 	Unweathered bedrock	 				 					
GaC:					i	İ	İ			i	i	İ
Gilpin				A-4, A-6			80-95		70-85		20-40	4-15
	 	Channery loam, shaly silt loam, silty clay loam	GC, SC	A-2, A-4, A-6	 	0-30	50-95 	45-90	35-85 	30-80	20-40	4-15
	27-35	Channery loam, very channery silt loam,		A-1, A-2, A- 4, A-6		0-35	 25 - 55 	120-50	15-45 	15-40	20-40	4-15
	 	very shaly silty clay loam	 	 	 	 	 	 	 	 	 	
	35 - 39 	Unweathered bedrock										
GaD:	 				1	 	 	1	l l	i i	1	
Gilpin				A-4, A-6	i				70-85		20-40	4-15
		Channery loam, shaly silt loam, silty clay loam	CL, CL-ML, GC, SC 	A-2, A-4, A-6	5 	0-30 	50-95 	45-90 	35-85 	30-80 	20-40	4-15
	 	Channery loam, very channery silt loam,		A-1, A-2, A- 4, A-6		0-35	25-55 	20-50	15-45	15-40	20-40	4-15
	 	very shaly silty clay loam Unweathered bedrock	 			 	 			 		

Table H.--Engineering Index Properties--Continued

Map symbol	Depth	 USDA texture	Classif 	fication	i	ments	l Pe	rcentag sieve n			 Liquid	
and soil name		 	 Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200	limit 	ticity index
	 In	<u> </u>	l	_	 Pct	 Pct	 	·		-	 Pct	! !
I		I	I	1		l		1	1		1	
GbC:	0.6		 OT OT MT			0 20		145 05	125 75	120 70	120 40	1 1 5
Gilpin	0-6	Shaly silt loam	GC, SC	A-2, A-4, A-6		U-3U	120-90	145-85	135-75	130-70	20-40	4-15
		Channery loam, shaly silt loam, silty		A-2, A-4, A-6		0-30 	50-95 	45-90 	35-85 	30-80	20-40	4-15
	27-35	clay loam Channery loam, very channery silt loam, very shaly silty clay		 A-1, A-2, A- 4, A-6 		 0-35 	 25-55 	 20-50 	 15-45 	 15-40 	 20-40 	 4-15
	35-39	loam Unweathered bedrock	 			 	 					
 Berks 		Channery silt loam	 GC, GM, ML, SC	A-2, A-4		 0-20 	 50-80 	45-70 	140-60	30-55 	25-36 	 5-10
İ		Channery loam, very channery loam, channery	SM	A-1, A-2, A-4	 	0-30	40-80 	35-70 	25-60 	20-45 	25-36 	5-10
	28-35	silt loam Channery loam, very channery loam, channery	 GM, SM 	 A-2, A-1 	 	 0-40 	 35-65 	 25-55 	 20-40 	 15-35 	 24-38 	 2-10
	35-39	silt loam Weathered bedrock	 			 	 					
Other Soils	 	 	 			 	 	 	 			
GbC3: Gilpin	0-6	 Shaly silt loam	 CL, CL-ML, GC, SC	 A-2, A-4, A-6		 0-30	 50-90	 45-85	35-75	30-70	120-40	4-15
		Channery loam,		A-2, A-4, A-6		 0-30 	 50-95 	45-90 	35-85 	30-80	20-40	4-15
	27-35	clay loam Channery loam, very channery silt loam, very shaly silty clay		 A-1, A-2, A- 4, A-6 	 	 0-35 	 25-55 	 20-50 	 15-45 	 15-40 	 20-40 	 4-15
 		loam Unweathered bedrock	 - - 	: 	 	 	 	 		 		

Table H.--Engineering Index Properties--Continued

			Classif	ication	Fragr	ments	l Pe	rcentag	e passi	ng		
	Depth	USDA texture	l		l			sieve n	umber		Liquid	
and soil name			 Unified		>10			I 10	1 40	1 200	limit	-
	 	 	Unliled	AASHTO	Inches	inches 	4	1 10	1 40	1 200	 	index
	' In		' <u></u>	<u> </u>	Pct	 Pct		\ <u></u>	\ <u></u>	¦	Pct	
		I .	l	L			l	1	1	1	1	1
Berks			SC	İ	į			İ		İ	25-36 	
	 	Channery loam, very channery loam, channery silt loam	SM	A-1, A-2, A-4 	 	0-30 	40-80 	35-70 	25-60 	20-45 	25-36 	5-10
	28-35 	Channery loam, very channery loam, channery silt loam	İ	A-1, A-2	 	0-40	35-65	25-55 	20-40	15-35 	24-38 	2-10
	35 - 39	Weathered bedrock	 	 			 					
Other Soils	 		 			 						
GbD:	 	 	! 	i I		 		 		İ		
Gilpin	0-6	Shaly silt loam	CL, CL-ML,	A-2, A-4, A-6	 	0-30 0-30	50-90	45-85 	35 - 75	30-70 	20-40	4-15
		Channery loam, shaly silt loam, silty	CL, CL-ML, GC, SC	A-2, A-4, A-6	 	0-30	50 - 95 	45-90 	35-85 	30-80	20-40	4-15
	27-35 	clay loam Channery loam, very channery silt loam,	 GC, GC-GM 	 A-1, A-2, A- 4, A-6	 		 25-55 	 20-50 	 15-45 	 15-40 	 20-40 	 4-15
	 35-39	very shaly silty clay loam Unweathered bedrock	 	 	 		 	 	 	 	 	
Berks		Channery silt loam	GC, GM, ML,	A-2, A-4		0-20	50-80	45-70	40-60	30-55	25-36	5-10
	7-28 	Channery loam, very channery loam, channery	GM, SC, SM, GC	A-1, A-2, A-4	 	0-30 	40-80	35-70 	25-60 	20-45	25-36 	5-10
	28-35 	silt loam Channery loam, very channery loam, channery	İ	 A-1, A-2 	 		 35-65 	 25-55 	 20-40 	 15-35 	 24-38 	 2-10
	 35-39	silt loam Weathered bedrock	 -	 	 		 	 	 		 	
Other Soils	 	 	 	 	 	 	 	 	 		 	

Table H.--Engineering Index Properties--Continued

	Ι	T	Classif	ication	Frag	ments			e passi		T .	
Map symbol and soil name	Depth	USDA texture	<u> </u>		_ 	1 3-10		sieve n	umber		Liquid limit	
and soll name	 		I Unified	I AASHTO		J-10 inches		I 10	1 40	1 200		lindex
							-				i	
	In				Pct	Pct	1			1	Pct	
Cl. D.3				1								
GbD3: Gilpin	l I 0=6	 Chaltreil+ loam	 CT CT=MT	 A-2, A-4, A-	 6 	1 U=3U	 50-90	1/15-85	135-75	130-70	120-40	 1=15
GIIPIII	1		GC, SC			1 0 30	30 30 	143 03	133 73	1 0 70	120 40	1 4 10
	6-27	Channery loam,		A-2, A-4, A-	6	0-30	50-95 	45-90 	35-85 	30-80	20-40	4-15
	I	loam, silty	,	İ	i	İ	İ	İ	i	İ	i	İ
		clay loam		1			I					
	27-35	Channery loam,		A-1, A-2, A-		0-35	25-55	20-50	15-45	15-40	20-40	4-15
	 	very channery silt loam,	 	4, A-6	1	 	 		1	1	1	
		very shaly					! 	i				!
		silty clay	İ	i	j	İ	İ	i	i	į	i	İ
		loam	l	1			1				1	
	35-39 	Unweathered bedrock										
Berks	l l 0-7	 Channery silt	IGC. GM. MI	 A-2 - A-4		1 0-20	 50-80	145-70	140-60	130-55	 25-36	I I 5-10
DCIKS	1 0 7		SC MI, MI,	2, 11 4	i	1 0 20	1	145 70	140 00	1	123 30	1 3 10
	7-28	Channery loam,	GC, GM, SC,	A-1, A-2, A-	4	0-30	40-80	35-70	25-60	20-45	25-36	5-10
		very channery		1	1		1				1	
		loam, channery										
		silt loam Channery loam,	ICM SM	 A-1, A-2		1 0-40	 35-65	125-55	120-40	115-35	124-38	 2=10
	1 20 33	very channery		11 1, 11 2	i	0 40	33 03	123 33	120 40	1 5 55	124 30	2 10
		loam, channery		İ	i	İ	İ	İ	i	į	i	I
		silt loam		1			I					
		Weathered										
	 	bedrock	 	1	1	 	 	1	1	1	1	
Other Soils					i			i		i		
				İ	j	İ	İ	İ	İ	Ì	İ	l
GbF:		1		!								
Berks	0-7	Channery silt loam	GC, GM, ML, SC	A-2, A-4		0-20	50-80	45-70	40-60	30-55	25-36	5-10
	l l 7-28	Channery loam,		Ι ΙΔ-1. Δ-2. Δ-	4	1 0-30	I I 4 0 – 8 0	135-70	125-60	120-45	125-36	I I 5-10
	1 , 20	very channery			1	0 30				1		3 10
		loam, channery		İ	i	İ	İ	İ	i	į	i	I
		silt loam		1			I					
		Channery loam,		A-1, A-2		0-40	35-65	25-55	20-40	15-35	24-38	2-10
	 	<pre> very channery loam, channery</pre>		 	 	 	 	1	1	1	1	
	' 	silt loam					! 	i	<u> </u>	<u> </u>	<u> </u>	'
	35-39	Weathered		İ	i						i	
		bedrock	l	I	1			1	1		1	1
				1								

Table H.--Engineering Index Properties--Continued

Map symbol	 Depth	 USDA texture	Classif	ication		Fragr	ments		_	e passi umber	-	 Liquid	 Plas-
and soil name			'				3-10					limit	ticity
		 	Unified 	AASHT()	inches	inches	4 	10	40	200		index
	In			'		Pct	Pct	'	·	<u> </u>		Pct	<u> </u>
Gilpin	 0-6 	 Shaly silt loam 	 CL, CL-ML, GC, SC	 A-2, A-4, 	A-6	 	 0-30 	 50-90 	45-85 	35 - 75	30-70 	120-40	4-15
		Channery loam, shaly silt loam, silty clay loam		A-2, A-4,	A-6	 	0-30	50-95 	45-90 	35-85	30-80	20-40	4-15
	27-35 	Channery loam, Channery loam, very channery silt loam, very shaly silty clay loam	GC, GC-GM 	A-1, A-2, 4, A-6 	A-	 	0-35 	 25-55 	20-50 	15-45 	15-40 	20-40	4-15
		Unweathered bedrock	 	 		 	 	 					
Other Soils	 	 	 	 		 	 	 					
GbF3: Berks	l l 0-7	 Chammann = -11+	CC CM MT	 A-2, A-4			l l 0-20	 50-80	145 70	 40-60	120 55	 25-36	 5-10
Derks) U= /	Channery silt	GC, GM, ML, SC	A-Z, A-4 			U-2U 	30 - 80	143-70	140-80	130-33	123-36	1 2-10
		Channery loam, very channery loam, channery silt loam	SM	A-1, A-2, 	A-4	 	0-30 	40-80 	35-70 	25-60 	20-45 	25-36 	5-10
	28-35 	Channery loam, very channery loam, channery silt loam		A-1, A-2 		 	0-40	35-65 	25-55	20-40	15-35 	24-38	2-10
	35-39	Weathered bedrock	 	 		 	 	 					
Gilpin	0-6	Shaly silt loam	CL, CL-ML, GC, SC	A-2, A-4,	A-6		0-30	 50-90	145-85	35-75	30-70	20-40	4-15
		Channery loam,		A-2, A-4, 	A-6	 	0-30	 50-95 	45-90 	35-85	30-80	20-40	4-15
	27-35 	Channery loam, Very channery Silt loam, Very shaly Silty Clay	 	A-1, A-2, 4, A-6 	A-	 	0-35 	25-55 	20-50 	15-45 	15-40 	20-40	4-15
	35-39	Unweathered bedrock	 - -	 		 	 	 	 	 	 		
Other Soils				i		i	i		·	·	i	i	i

Table H.--Engineering Index Properties--Continued

	 		Classif	ication	Fragi	ments	l Pe	rcentag	e passi			
Map symbol	Depth	USDA texture	l		.		1	sieve n	umber		Liquid	
and soil name					>10	3-10	ļ				limit	
			Unified	AASHTO	linches	linches	4	10	40	200		lindex
	 In	¦	 	-	 Pct	 Pct	<u> </u>	<u> </u>	<u> </u>	<u> </u>	 Pct	<u> </u>
	l T11	I I	 		l ECC	l ECC	 	 	 	l I	I FCC	
		i I	 			! 	! 	' 	! 	' 	i	'
JsD:		i	' 	i	i	İ	i i	İ		İ	i	İ
Jefferson	0-9	Very stony loam	CL, GM, ML,	A-4	·	5-20	65-90	60 - 90	50-80	40-60	25-35	2-10
		1	SM								1	1
		Channery loam,		A-2, A-4, A-6		5-20	75-90	70-90	50-80	30-70	15-35	2-15
		gravelly clay										
		loam, gravelly										
		sandy clay										
		loam Very channery	CC-CM CM	A-2, A-4, A-1		 5_25	 55_75	 50_75	135_70	120-60	120-35	 2_10
		loam, gravelly		A-2, A-4, A-1	1	1 3-23	133-73	100-75	133-70	20-60 	120-33	1 2-10
		clay loam,	1112, 511			' 	! 	i	' 	İ	<u> </u>	i I
		gravelly sandy	! 		i	' 	' 	i I	' 	İ	i	'
		clay loam		i	i	İ	i	i	İ	İ	i	i İ
		1	l								1	1
JsF:		1										
Jefferson	0-9			A-4		5-20	65-90	60-90	50-80	40-60	25-35	2-10
		·	SM								115 05	
		Channery loam,		A-2, A-4, A-6		5-20	1/5-90	1/0-90	150-80	30-70	15-35	2-15
		gravelly clay loam, gravelly				1	 	1	1	 	1	
		sandy clay	 		1	 	 	 	 	l I	1	
		loam	! 			' 	! 	i	' 	İ	<u> </u>	'
		Very channery	GC-GM, GM,	A-1, A-2, A-4	i	5-25	55 - 75	50-75	35-70	20-60	120-35	2-10
		loam, gravelly		i	i	i İ	i İ	i İ	i İ	İ	i	i İ
		clay loam,	 		İ	İ	İ	ĺ	İ		İ	İ
		gravelly sandy										
		clay loam	l									
		1										[
Ka:							100 100		145 05		115 05	
Kanawha	J U-8	_	SC-SM, SM, CL-ML, ML	A-2, A-4		0	180-100	1/5-100	145-85	25-55	15-25	INP-5
	I I 8–13			A-2, A-4, A-6	 	I 0	I 180-100	I 175-100	I I50-100	130-90	120-35	I I 2-12
			SM	11 2, 11 4, 11	1	1	100 100	1 73 100	1	1	120 33	2 12
		loam		i	i	i İ	i	i	İ	İ	i	İ
	13-54	Loam, sandy	CL, ML, SC,	A-2, A-4, A-6		0	80-100	75-100	60-100	25-80	20-40	3-15
		clay loam,	SM								1	1
		clay loam	l									
				A-2, A-4, A-6		0	60-100	55-100	40-95	20-60	20-35	2-12
		loam, gravelly	SM					1		Į.		[
		fine sandy	 			1		1	1	l I	1	1
		loam, sandy clay loam	 	I I	1	 	 	I I	 	I I	1	
		I CTAY TOAM	 	1	1	I I	 	I I	I I	l I	1	I I
		I	I	T.	1	I	1	I	I	I .	1	I

Table H.--Engineering Index Properties--Continued

Map symbol	Depth	 USDA texture	Classi	fication	Frag	ments		_	e passi: umber	_	 Liquid	 Plas-
and soil name	-	 	 Unified	 AASHTO		3-10 inches	4	10	40	200	limit	ticity index
		<u> </u>	I		 Pct	 Pct	 	 		l	 Pct	
LdF:		İ	İ	į	İ	į	I	İ	İ	İ	į	į
Lehew		Extremely stony sandy loam	 CL-ML, GM, ML, SM	A-2, A-4	 	 20-50	 50-90	 45-80 	 40-75	 20-55 	15-30	 NP-7
	10-27	Very channery sandy loam, channery fine sandy loam,	GC-GM, GM, SC-SM, SM 	A-2, A-4	 	5-40 	45-75 	30-65 	20-55 	10-40 	15-30 	NP-7
	27-33	channery loam Very channery sandy loam, very channery fine sandy loam, channery	GC-GM, GM, SC-SM, SM 	A-2, A-4	 	 10-50 	 45-75 	 30-65 	 20-55 	 10-40 	 15-30 	 NP-7
	33-37	Toam Weathered bedrock	 		 	 	 	 	 	 		
Dekalb		Extremely stony sandy loam	CL-ML, GM, ML, SM	A-1, A-2, A-4	 	15-30	 50-90 	 45-80 	40-75 	 20-55 	10-32	NP-10
	9-21	Channery sandy loam, channery loam, very channery sandy loam	GC-GM, GM, ML, SM	A-1, A-2, A-4	 	5-40 	50-85 	40-75 	40-75 	20-55 	15-32 	NP-9
		Channery sandy loam, flaggy sandy loam, very flaggy loamy sand		A-1, A-2, A-4	 	10-50	45-85 	25-75 	20-65 	15-40 	15-32 	NP-9
ļ	28-32	Unweathered bedrock	 				 	 		 		
Other Soils		 	 		 	 	 	 	 	 		
L1B: Lily	0-8	 Toam	 CL-ML, ML	 A-4	 	 0-5	 90 - 100	 85 - 100	 70-95	 55-80	 15-35	 NP=10
<u>'</u> '	8-25	Clay loam,	CL, ML, SC, SM		 						15-35	
	25-30	Sandy clay	CL, ML, SC, SM 	A-1-b, A-2, A-4, A-6	 	0-10	65-100 	50-100 	40-95 	20-75 	15-35 	3-15
 	30-34	loam Unweathered bedrock	 		 		 	 		 		

Table H.--Engineering Index Properties--Continued

Map symbol	 Denth	 USDA texture	Classif	ication	Fragr	ments		rcentage	-		 Liquid	 Plas=
and soil name	l peben	ODDIT CERCUIC		I	-¦ >10	3-10		JICVC III	aniber		limit	
ĺ			Unified	AASHTO	linches	inches	4	10	40	200		lindex
	 In	 	 		Pct	Pct	! 	 	! !	! !	Pct	
LlC:		l I	 	! 		 	 	 	 	 		1
Lily	0-8	Loam	CL-ML, ML	A-4	i	0-5	90-100	85 - 100	70 - 95	55-80	15-35	NP-10
-		•	CL, ML, SC, SM	A-4, A-6		0-5 	90-100 	85-100 	75-100 	40-80 	15-35 	3-15
	25-30	Sandy clay		A-1-b, A-2, A-4, A-6		0-10 	65-100 	 50-100 	 40-95 	 20-75 	15-35 	3-15
		Toam Unweathered bedrock	 	 		 	 	 	 	 		
LlD:		l I	! 	 		 	 	 	 	 		
Lily	8-25 I	Clay loam,		A-4 A-4, A-6	 		90-100 90-100 					
	25-30 	Sandy clay		A-1-b, A-2, A-4, A-6		0-10 	65-100 	 50-100 	40-95 	 20-75 	15-35 	3-15
	30-34 	Ioam Unweathered bedrock 	 	 	 	 	 	 	 	 		
Lo:		<u> </u>	!		1							
Lobdell		Loam Loam, silt loam	CL, CL-ML, ML	A-4 A-4			95 - 100 90 - 100					
	35-60		CL, CL-ML,	A – 4 A – 4 			90-100 90-100 					
Holly		 	 			 	 	 	 	 		

Table H.--Engineering Index Properties--Continued

			Classif	ication		Fragi	ments	l Pe:	rcentag	e passin	 1g		
Map symbol	Depth	USDA texture	l			l		1 :	sieve n	umber		Liquid	
and soil name		1					3-10	ļ	1 10	1 10		llimit	-
	l I		Unified	AASH	TO	inches	linches	4	10	40	200	1	index
	' I Tn	¦	! !	! !		Pct	l Pct	! !	! !	 	 	 Pct	!
	====	İ		İ		1	100		İ		! 		'
MqB:	İ	i	I	İ		i	İ	İ	i İ	İ	I	i	i İ
Monongahela	0-8		CL-ML, ML, SC-SM, SM	A-4			0-5	90-100	85-100 	75-100 	45-90 	20-35 	1-10
		Silt loam, clay loam, gravelly loam		A-4, A-	6		0-15 	90-100 	80-100 	75-100 	70-90 	20-40	5-15
		Silt loam, sandy clay loam, gravelly loam		A-4, A-	6	 	0-10 	80-100 	60-100 	55-95 	45-95 	20-40	3-15
	60-64	Ioam Silt loam, clay loam, gravelly sandy loam		A-4, A-	6	 	 10-20 	 75-100 	 60-90 	 60-85 	 40-85 	20-40	1-15
MqC:	l I		 									1	
Monongahela	0-8		CL-ML, ML, SC-SM, SM	A-4			0-5	90-100	 85-100	75-100	 45-90	20-35	1-10
		Silt loam, clay loam, gravelly	CL, CL-ML, ML	A-4, A-	6		0-15 	90-100 	 80-100 	75-100 	70-90 	20-40	5-15
	21-60 	loam Silt loam, sandy clay loam, gravelly loam		 A-4, A- 	6	 	 0-10 	 80-100 	 60-100 	 55-95 	 45-95 	 20-40 	 3-15
	60-64 	Silt loam, clay loam, gravelly sandy loam		A-4, A-	6	 	10-20 	75-100 	 60-90 	60-85 	40-85 	20-40	1-15
MsD:		i		i I		i	' 		İ	İ		i	i
Murrill	0-11		CL, ML, SC, SC-SM	A-2, A-	4, A-6		3-15 I	65-80 	50-70 	45-65 	30-65 I	20-40	3-15 I
	 	Channery silty clay loam, channery sandy clay loam, channery clay loam		A-4, A- 	6, A-7	 	0-15 	65-85 	60-70 	55-65 	50-65 	25-50 	5-25
	41-72		 CH, CL, MH 	A-6, A- 	7	 	0-20	80-100 	65-100 	 60-100 	 55-100 	35-75 	20-40

Table H.--Engineering Index Properties--Continued

Map symbol	 Depth	 USDA texture	 	Cl	assif	icati	on		i	ments		_	e passi: umber	-	 Liquid	
and soil name	 			Unifi	ed	 A	ASHTO		>10 inches	3-10 inches		10	40	200	limit 	ticity index
	 In	 	¦						Pct	Pct	 			 	Pct	
MsF: Murrill	 0-11	 Very stony loam	 CL, SC		sc,	 A-2,	A-4,	A-6	 	3-15	 65-80	 50-70	 45-65	 30-65	20-40	 3-15
	 	Channery silty clay loam, channery sandy clay loam, channery clay loam	CL, 		L, ML	 A-4, 	A-6,	A-7	 	 0-15 	 65-85 	 60-70 	 55-65 	 50-65 	 25-50 	 5-25
	•			CL,	MH	A-6,	A-7		 	0-20	 80-100 	 65-100 	60-100 	 55-100 	 35-75 	 20-40
MuC: Murrill	 0-11	 Channery silt	 CL,	GM,	ML,	 A-6,	A-2,	A-4	 	 0-5	 65-80	 55-70	 45-65	 30-65	 20-40	 3-15
	11-41	Channery silty clay loam, channery sandy			L, ML	 A-4,	A-6,	A-7	 	 0-15 	 65-85 	 60-70 	 55-65 	 50-65 	 20-50 	 5-25
	 41-72	clay loam, channery clay loam Clay loam, clay, channery clay loam	 CH,	CL,	МН	 A-6, 	A-7		 	 0-20 	 80-100 	 65-100 	 60-100 	 55-100 	 35-75 	 20-40
MuD: Murrill	0-11		 CL, SC		ML,	 A-2,	A-4,	A-6		0-5	 65-80		45-65	 30-65	20-40	3-15
	 	Channery silty clay loam, channery sandy clay loam, channery clay	CL, 		L, ML	A-4, 	A-6,	A-7	 	 0-15 	 65-85 	 60-70 	 55-65 	 50-65 	 20-50 	 5-25
	 41-72 	loam Clay loam, clay, channery clay loam 		CL,	MH	 A-6, 	A-7		 	 0-20 	 80-100 	 65-100 	 60-100 	 55-100 	 35-75 	 20-40

Table H.--Engineering Index Properties--Continued

 Map symbol	Depth	 USDA texture	 	Classif	icati	on		Fragi	ments		rcentago sieve n	e passin umber	_	 Liquid	 Plas-
and soil name	-1		i I	Jnified	 A	ASHTO		>10 inches	3-10 inches	i	10	40		llimit	
l	———							 Pct	 Pct	¦	¦	¦	 	 Pct	
		1							ļ.	1	Į.			1	1
Oa: Orrville	0-10	l ISilt loam	I CT	CL-ML, ML	Ι ΙΔ-4			 	I I 0	1 100	I I 90-100	I 185-100	I I 60-80	120-35	I 3-10
	10-31		CL,	CL-ML, ML		A-6		 						20-40	
 	31-60			ML, SC,	A-1, 	A-2,	A-4	 	0-2 	 95-100 	 65-100 	 40-85 	 15-75 	15-35 	NP-10
Holly			 		 			 	 	 	 	 	 		
Ob:													! 		
Orrville				CL-ML, ML					0					20-35	
 		Silt loam, loam, silty clay loam		CL-ML, ML	A-4, 	A-6		 	0-2 	95-100 	75-100 	70-95 	50-90 	20-40 	2-16
 	31-60	-		ML, SC,	A-1,	A-2,	A-4	 	0-2 	95-100 	65-100 	40-85 	15-75 	15-35 	NP-10
Lobdell	0-10	Loam	CL,	CL-ML, ML	A-4				0	95-100	90-100	80-100	 65-90	20-30	NP-8
		Loam, silt loam			A-4					•				20-35	
 		Stratified sandy loam to silt loam		CL-ML, SM	A-4 			 	0 	90-100 	80-100 	65-85 	40-80 	15-35 	NP-10
Other Soils															
Holly		 	 		 			 	 	 	 	 	 		
ShB:		İ	İ		i			İ	İ	İ	İ	İ	İ	i	i
Shouns				CL-ML, ML								65-95		15-30	3-12
 	48-60	loam, clay	CL,		A-4, A-4,			 !						15-35 25-40	
	60-64	loam, clay	CL,	ML	 A-6, 	A-7		 	 10-25 	 75 - 100 	 65-90 	 60-85 	 50 - 75 	30-45	110-20
 	76-80	loam, shaly clay loam Unweathered bedrock	 		 						 	 	 		

Table H.--Engineering Index Properties--Continued

	 	I		Class	if:	icati	on		Fragi	ments	l Pe:	rcentag	e passi	ng		
Map symbol	Depth	USDA texture	i					i	_			sieve n	umber	-	Liquid	Plas-
and soil name		1				l		- 1		3-10	l				limit	-
			1	Unified		l A	ASHTO		inches	linches	4	10	40	200		index
	' In		¦						Pct	 Pct	¦	¦		¦	 Pct	'
İ		İ	İ			I		i		I	i İ	i İ	İ	İ	j	İ
ShC:		I				I		-								
Shouns				CL-ML,				- 1			80-100					3-12
1		Silt loam, loam													15-35	
I			CL,	ML		A-4,	A-6			0	80-100	75-100	70-95	60-90	25-40	8-17
		loam, clay				l										!
		loam														
			CL,	ML		A-6,	A-1/			110-25	175-100	165-90	160-85	150-75	30-45	110-20
		loam, clay loam, shaly												1		
		clay loam	 			l I				 	 	1	 	1	1	
		Clay 10am	 			 				 						
		bedrock	! 			 				! 	1	! 	1	i	1	!
	! 	bearoon	i I			' 		ľ		! 	! 	' 	! 	i	1	!
ShD:		i	i			İ		i		I	i	i	i	i	i	I
Shouns	0-8	Silt loam	CL,	CL-ML,	ML	A-4,	A-6	i		0	80-100	75 - 100	65 - 95	55 - 90	15-30	3-12
İ	8-48	Silt loam, loam	CL,	CL-ML,	ML	A-4,	A-6	ĺ		0	80-100	75-100	70-95	60-90	15-35	5-15
			CL,	ML		A-4,	A-6	-		0	80-100	75-100	70-95	60-90	25-40	8-17
		loam, clay				l		- 1						1		
		loam				l		- 1								
			CL,	ML		A-6,	A-7	- 1		10-25	75-100	65-90	60-85	50-75	30-45	10-20
I		loam, clay				l										
		loam, shaly				l										!
		clay loam										!	!			!
		Unweathered				l										
	 	bedrock				 				 	1	1		1		
StC:	 	I I	 			l I				 	 	1	 	1	1	
Shouns	I N-8	 Very stony silt	I CT.	CTMT.	MT.	I I Δ <i>—</i> Δ	Δ-6			I I 5-15	180-100	1 175-100	1 165-95	155-90	115-30	I I 3-12
		loam	01,	OB 1111,	1111	11 1 ,	11 0	ľ		1 3 13	1	1	1	1	1	1 3 12
			CL.	CL-ML		A-4,	A-6	i		0-5	80-100	75-100	170-95	160-90	125-40	8-17
j		loam, clav	,			, 		i		İ		İ	İ	İ	i	İ
		loam	i			i İ		i		İ	i İ	i	i i	i	i	İ
İ	48-60	Silty clay	CL,	ML		A-4,	A-6,	A-7		10-25	75-100	65-90	60-85	50-75	30-45	10-20
I		loam, clay				l		-						1		
		loam, shaly				l		-								
		clay loam						1								
		Unweathered						- 1								
ļ		bedrock										1	1	1	1	
		I	I			l		١				1	1			

Table H.--Engineering Index Properties--Continued

Mara armila i	 			Classif	icati	on		Fragr	ments		rcentage	e passir			 Plas-
Map symbol and soil name	Depth	USDA texture	 					>10	3-10	: 	sieve n	umber			Plas= ticity
			1	Unified	A	ASHTO		inches	linches	4	10	40	200		index
	 In	.!	¦		 			Pct	 Pct	 	 	 	 	 Pct	¦
-:-		1			l ·				l	l	l	l	l	I	l
StD: Shouns	l I 0-8	 Very stony silt	lot.	CT.=MT. MT.	 D = 4	Δ-6			 5-15	 80=100	 75=100	l 165-95	 55 - 90	 15-30	 3-12
Silouiis		loam		CE 1112, 111		11 0			3 13		75 100				3 12
			CL,	CL-ML	A-4,	A-6			0-5	80-100	75-100	70-95	60-90	25-40	8-17
		loam, clay loam	l I		 				 	 	 	 	 	 	
			CL,	ML	A-4,	A-6,	A-7		10 - 25	75 - 100	65 - 90	60-85	50 - 75	30-45	10-20
		loam, clay loam, shaly							 						
	 	clay loam			 				 	 	 	 	 		
	60-64	Unweathered	ļ.		ļ										
	 	bedrock	l I		l I				 	 	 	 	 	 	
TtB:		İ	i		İ					i İ	I	i İ	i I	İ	İ
Tilsit					A-4, A-4,							75 - 100			4-15 5-20
		silty clay	СБ , 	CT-MT	A-4,	A-0			l 0			/3-100			3-20
		loam, loam		07 1/7		- c									
		Silt loam, silty clay	ГСБ , Г	CL-ML	A-4, 	A-6,	A-/		0 	90 - 100	 85-100	75 - 100	 02-100	25-45 	5-25
		loam, loam	i		I				i İ	i İ	i i	i İ	İ	İ	i
	65-69 	Unweathered bedrock	 		 				 				 		
		Bearook	i								İ				
TtC: Tilsit	0.7	 Silt loam		CL-ML	 A-4,	7 (l I 0			 75-100		120 25	 4-15
TIISIU					A-4, A-4,				•		•	75=100 75=100			
		silty clay	ĺ		ĺ				İ	İ	İ	İ		İ	İ
		loam, loam Silt loam,	l CT.	CL-ML	 A-4.	A-6,	A-7		l I 0	 90-100	 85-100	 75-100	l 165-100	 25-45	 5-25
		silty clay	02,	02 112		0,	'								
		loam, loam Unweathered			 				 				 		
	03-09	bedrock			! 				 	 	 	 			
m		1	I		ļ										
Tv: Tygart Variant	 		l I		 				 	 	 	 	 	 	
		i	i		I				i İ	i İ	i i	İ	İ	İ	i
Purdy			 		 										
U1:		İ							 	i I	i I			İ	
Udorthents					 										
U2:	 				 				! 	 	 	 	 	 	
Udorthents					l										
	l	I	I		I				l	I	I	I	I	I	I

Table H.--Engineering Index Properties--Continued

Map symbol	 Depth	 USDA texture	Classifi	cation	Frag	ments		rcentage			 Liquid	 Plas-
and soil name	 	 	Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200	limit 	ticity index
	 In	 			Pct	Pct	¦	¦	¦		Pct	¦
U3: Udorthents	 	 	 		 	 	 	 	 			
Wet Minesoil								i				
U4: Udorthents	 	 	 	 	 	 	 	 	 	 		
Wet Minesoil											i	
Ud: Psamments	 	 	 		 	 	 	 				
Udifluvents	 										ļ	
UeC: Urban Land	İ	 	 		 	 	 	 	 	 		
Other Soils	 	 	 		 	 	 	 				
Ernest	9-24 	•	CL, CL-ML, ML CL, CL-ML, ML 		•			80-100 70-95 			20-40 25-50 	
	 	Channery silt loam, channery loam, silty clay loam		A-4, A-6, A-7	 	0-20	70-95 	55-95 	55-90 	45-90 	20-45	4-18
	38-60 	Channery silt	CL, GM, ML, SC 	A-7, A-4, A-6	 	0-20 	70-95 	45-95 	45-90 	40-90 	25-50	6-22
UfD: Urban Land	 0-6	 	 		 	 	 	 	 	 		

Table H.--Engineering Index Properties--Continued

			Classif	ication	Fragi	nents	l Pe	rcentag	e passin	 1g		
Map symbol	Depth	USDA texture			<u> </u>		:	sieve n	umber		Liquid	
and soil name	 		 Unified	AASHTO	>10 inches	3-10 inches	 4	10	40	200	limit	ticity index
	 In		 	1	Pct	Pct		! !	<u> </u>	 	Pct	
Frederick	 0-13		 CL, GC, GM, ML	A-4, A-6	 	 0-10	 60-80	 50-75	40-70	 35-65 	15-35	 NP-15
	 	Gravelly silty clay loam, silty clay, clay	•	A-7 	 	 0-5 	 80-100 	 50-95 	45-90 	 35-85 	50-70 	 20-40
	17-24	_	CH	A-7		0-5	90-100	85-100	70-100	60-85	60-85	30-50
	24-72	•	CH	A-7		0-5	90-100	 85-100	70-100	 50 - 75	50-75	 25-45
	72-76		 									
Other Soils	 		 			 	 	 		 		
UgE: Urban Land	 0-6	 	 	 	 	 	 	 	 	 		
Other Soils	 											
Gilpin	 0-6 	Shaly silt loam 	 CL, CL-ML, GC, SC	A-2, A-4, A-6	 	 0-30 	 50-90 	 45-85 	 35 - 75 	 30-70 	20-40	 4-15
	 	Channery loam, shaly silt loam, silty clay loam	CL, CL-ML, GC, SC 	A-2, A-4, A-6	 	0-30	50-95 	45-90 	35-85 	30-80	20-40	4-15
	27-35 	Channery loam, very channery silt loam, very shaly silty clay loam		A-1, A-2, A- 4, A-6 	 	0-35 	25-55 	20-50 	15-45 	15-40 	20-40	4-15
		loam Unweathered bedrock	 	 	 	 	 	 	 	 	 	
Berks	 0-7	Channery silt loam	 GC, GM, ML, SC	A-2, A-4		0-20	 50-80	 45-70	140-60	 30-55 	25-36	 5-10
	 	Channery loam, very channery loam, channery silt loam	GC, GM, SC, SM	A-1, A-2, A-4	 	0-30	40-80 	 35-70 	25-60 	 20-45 	25-36 	5-10
	28-35 	Channery loam, very channery loam, channery	l	A-1, A-2	 	0-40	 35-65 	 25-55 	20-40	 15-35 	24-38	2-10
	35 - 39	silt loam Weathered bedrock 	 	 	 	 	 	 	 	 	 	

Table H.--Engineering Index Properties--Continued

Map symbol	 Depth	USDA texture	Classif	ication	Fragi	ments		_	e passir umber	_	 Liquid	 Plas=
and soil name	l Depen	ODDII CCACGIC	¦		-¦	3-10		JICVC II	uniber		-	ticity
		İ	Unified	AASHTO	linches		4	10	40	200		index
	 In	 	 		Pct	Pct		 			Pct	
UlC:												
Urban Land	 0-6	 	[
Other Soils	 							l 				
Other Solis						 						
Lily				A-4		0-5		85-100				NP-10
		sandy clay	CL, ML, SC, SM	A-4, A-6 		0-5 	90-100	 85-100	75-100 	40-80 	15-35 	3-15
		loam, loam Sandy clay	 CL, ML, SC,	 A-1-b, A-2,		 0-10	 65_100	 50_100	 40-95	 20_75	115_35	1 2_15
				A-4, A-6		0-10				20-75	112-22	3-13
		loam, gravelly	Į.	1		<u> </u>	ļ	ļ	1	l		
	 	sandy clay loam	 	 		 	 	l I	 	 	 	
	30-34	Unweathered	İ	İ	i		i		i		i	i
	 	bedrock	l I	 		 	 	l I	 	 	 	
UmD:	İ	İ	İ	İ	i	i İ	İ	İ	i	İ	İ	i
Urban Land	0-6		[1								
Other Soils	 		 	 		 	 	 		 		
Murrill		Channery silt loam	CL, GM, ML, SC-SM	A-2, A-4, A-	6	0-5	65-80	55-70	45-65	30-65	20-40	3-15
		Channery silty		 A-4, A-6, A-	7	 0-15	 65-85	 60-70	 55-65	 50-65	 20-50	5-25
		clay loam,	I	į	İ	İ	ĺ	ĺ	į		İ	İ
		channery sandy clay loam,	 	 		 	 	l I	 	 	 	
		channery clay	İ	İ	i	İ	İ	į	i	İ	İ	i
		loam Clay loam,	 CH, CL, MH	 A-6, A-7		l l 0-20	 80=100	 65=100	 60-100	 55 - 100	 35-75	120-40
		clay, channery				0 20		03 100			33 73	
	 	clay loam				 	 	l I		 		
Uo:	! 							i I		! 		
Urban Land	0-6											
Other Soils				 				 				
Orrville	l l 0-10	 Silt.loam	 CL, CL-ML, ML	 A – 4		l I 0	 100	 90-100	 85 - 100	l 160-80	 20-35	 3-10
	10-31	Silt loam,	CL, CL-ML, ML				95-100				20-40	2-16
		loam, silty clay loam	[[-		
		· -	CL, ML, SC,	A-1, A-2, A-	4	0-2	95-100	 65-100	40-85	 15 - 75	15-35	NP-10
		gravelly loamy	SM	1				l	1			
		sand to silt loam	 	 		 	! 	! 		 		

Table H.--Engineering Index Properties--Continued

Map symbol and soil name	 Depth 	 USDA texture 	Classif	Fragments						 Liquid	 Plas-	
			İ	I	>10	3-10	İ				limit	
			Unified	AASHTO	linches	linches	4	10	40	200		lindex
	 In	 	 	 	Pct	Pct	 	 	' 	' 	Pct	'
Lobdell	10-35 35-60	Loam, silt loam	CL, CL-ML,	A-4	 	0		80-100	70 - 95	55-85	 20-30 20-35 15-35	NP-10
W:	 	 	 	 	[[I I	 	 	 	
Water												
WeC:		i	İ	İ	İ	İ	İ	İ		İ	İ	İ
Westmoreland	9-36 I		CL, GC, GM,	A-4, A-6 A-4, A-6, A-7 	 						15-35 22-45 	
	36-46 	silt loam Very channery loam, very channery silt loam, shaly	SM	 A-1, A-2, A- 4, A-6	 	 0-20 	 25-95 	 20-95 	 15-90 	 15-80 	 20-40 	 2-20
		silty clay loam Unweathered bedrock	 	 	 	 	 	 	 	 	 	
WeD:	İ	İ	İ	İ	į	į	į	i	İ	İ	İ	İ
Westmoreland	9-36 		CL, GC, GM,	A-4, A-6 A-4, A-6, A-7 	 						15-35 22-45 	
	36-46 	Very channery loam, very channery silt loam, shaly	SM	A-1, A-2, A- 4, A-6 	 	0-20 	 25-95 	 20-95 	 15-90 	 15-80 	20-40 	2-20
	 46-50	silty clay loam Unweathered bedrock	 	 	 	 	 	 	 	 	 	

Table H.--Engineering Index Properties--Continued

		USDA texture	Classification		Fragments 		Percentage passing sieve number					
Map symbol	Depth 										Liquid Plas-	
and soil name				 AASHTO	>10 3 inches in		I				limit	ticity
			Unified				4	10	40	200		lindex
	 In		 	<u> </u>	 Pct	 Pct	¦	¦	¦	¦	 Pct	¦
		i	İ	i	İ	i	i	i	i	i	i	i
WeF:		İ		Ì		İ		İ	İ	İ	j	
Westmoreland 	0-9	Silt loam	CL, ML	A-4, A-6		0	85-100	80-100	75-95	60-95	15-35	NP-10
	9-36	Silty clay	CL, GC, GM,	A-4, A-6, A-7		0-15	65-100	55-95	50-90	45-85	22-45	2-20
		loam, channery	ML									
		loam, shaly										
		silt loam										
	36-46					0-20	25-95	20-95	15-90	15-80	20-40	2-20
			SM	4, A-6								
		channery silt		!				!				
		loam, shaly										
		silty clay										
		loam										
	46-50	Unweathered										
		bedrock										
						1			1			
	l	_ I	l	.	l	l	l	l	1		_	.